



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/611,388  | 06/30/2003  | Vance A. Deason      | B-309               | 1531             |
| 7590  | 06/28/2004  |                      | EXAMINER            |                  |
| Stephen R. Christian<br>BBWI<br>PO BOX 1625<br>IDAHO FALLS, ID 83415-3899 |             |                      | LOBO, IAN J         |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3662                |                  |
| DATE MAILED: 06/28/2004   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                         |                  |
|------------------------------|-------------------------|------------------|
| <b>Office Action Summary</b> | Application No.         | Applicant(s)     |
|                              | 10/611,388              | DEASON ET AL.    |
|                              | Examiner<br>Ian J. Lobo | Art Unit<br>3662 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6, 9-11, 13-20 and 22 is/are rejected.
- 7) Claim(s) 7,8,12,21 and 23 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. ____ .   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/19/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: ____ .                                   |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5, 9, 11, 15, 19, 20 and 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the patent to Gabor (904).

The patent to Gabor discloses an ultrasonic camera that includes an acoustic source (3) configured to generate an acoustic wavefront for impinging a target object (50), a screen (5) having first and second sides with the sides configured to physically deform in response to the reflected acoustic wavefront (see col. 4, last 7 lines), and a first optical processing system (see Fig. 1). The breadth of independent claims 1, 9 and 15 is such as to be anticipated by the system of Gabor.

Dependent claims 5, 11, 19, 20 and 22 are further anticipated by the Gabor system.

3. Claims 1-5, 9-11, 13, 15-17, 19, 20 and 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by the patent to Macovski ('457).

The patent to Macovski discloses an ultrasonic camera that includes an acoustic source (13) configured to generate an acoustic wavefront for impinging a target object (12), a screen (16) having first and second sides with the sides configured to physically deform in response to the reflected acoustic wavefront (see col. 5, lines 7-10), and a first optical processing system (see Fig. 1). The breadth of independent claims 1, 9 and 15 is such as to be anticipated by the system of Macovski.

With respect to claim 2, 4, 13 and 17, see lens (15).

With respect to claim 3, see Fig. 1.

With respect to claim 5 and 20, see col. 5, lines 7-10.

With respect to claims 10, 11, 16 and 22, see Fig. 1.

With respect to claim 19, see acoustic source (13).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macovski ('457) when taken in view of Buchholz (884).

Claims 6, 14 and 18 differ from the system of Macovski by claiming that the screen and acoustic lens are integral.

Buchholz teaches (see col. 3, lines 16-20) a optical detection system wherein the membrane or screen and acoustic lens are integral. Such a configuration provides a measurement system with less distortion than one where the lens and screen are separated. Concomitantly, in view of Buchholz, it would have been obvious to one of ordinary skill in the art to have modified Macovski's system by configuring the separate lens and screen structure to a structure where the lens and screen are integral.

***Allowable Subject Matter***

6. Claims 7, 8, 12, 21 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian J. Lobo whose telephone number is (703) 306-4161. The examiner can normally be reached on Monday - Friday, 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on (703) 306-4171. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ian J. Lobo  
Primary Examiner  
Art Unit 3662

ijl